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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,036	02/02/2001	Dennis J. Malfer	EP- 7503	8721

7590 07/23/2003

ETHYL CORPORATION  
330 South Fourth Street  
Richmond, VA 23219

EXAMINER

TOOMER, CEPHIA D

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 07/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/776,036

Applicant(s)

MALFER ET AL.

Examiner

Cephia D. Toomer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 May 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-65 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

This Office action is in response to the remarks filed May 9, 2003.

#### ***Claim Rejections - 35 USC § 102***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-9, 13, 59 and 63 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 182,940 for the reasons of record.

#### ***Claim Rejections - 35 USC § 103***

3. Claims 14-31, 35-53, 57-58 and 64-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 182940, as applied to the above claims, and further in view of Malfer (US 5,725,612) for the reasons of record.

Applicant argues that '940 prefers to use primary monoamines containing 6 to 18 carbon atoms or diamines. Applicant argues that '940 amines do not disclose the dibutylamine constituent used in the Mannich reaction. Applicant argues that '940 exemplifies polyamines and cocoamines but no secondary dialkyl monoamines.

At page 5, first full paragraph, '940 teaches that dibutylamine is one of the specific amines contemplated for use in the Mannich reaction. While it is true that '940 exemplifies cocoamine and polyamines, it is well settled that a reference is considered for all that it teaches and is not limited to the examples therein. *In re Fracalossi*, 215 USPQ 569 (CCPA 1982).

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Applicant argues that the phenolic constituent in the Mannich reaction has a hydrocarbyl group that has a molecular weight of from about 500-3000 and does not overlap the molecular weight of the constituent of '940. Applicant argues that '940 does not teach steric hindrance of two positions on the hydroxyaromatic constituent.

The number of carbon atoms in the hydrocarbyl constituent is up to 40 carbon atoms. An alkyl group containing 40 carbon atoms would possess a molecular weight of approximately 560. This molecular weight clearly anticipates applicant's claimed molecular weight range.

With respect to '940 not teaching steric hindrance of two positions on the hydroxy aromatic constituent, '940 teaches at page 4, first full paragraph that the phenols contemplated for use in forming the alkylated phenols include cresol, and phenolic compounds such as xlenol.

Applicant argues that it would not have been obvious to combine '949 and Malfer because '940 does not teach the claimed Mannich reaction products as set forth in the claims.

The examiner respectfully disagrees. As stated above '940 teaches all of the claimed limitations regarding the constituent. Therefore, it would have been obvious to combine '940 and Malfer because '940 teaches that the additive is combined with a carrier fluid and Malfer teaches that PAO, polyoxyalkylene and solvent carriers further enhance the effectiveness of the Mannich product in minimizing intake valve deposits.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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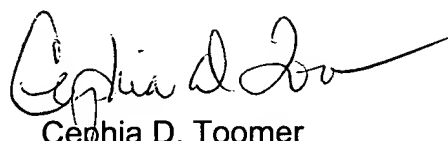
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 703-308-2509. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Cephia D. Toomer  
Primary Examiner  
Art Unit 1714

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July 23, 2003